REMARKS

The Applicant has carefully considered the Office Action mailed May 3, 2007, and in view of the arguments presented by the Examiner, the claims have been extensively amended. As now presented, the Applicant believes that all of the prior art citations have been overcome and the claims, as now presented, are all in condition for allowance.

As now amended, Claim 1 specifically details the portable, cleaning system of the present invention as comprising a single motor which is employed for simultaneously driving both the rotational movement of the shaft/cable, to which the cleaning brush is mounted, as well as the gears employed for producing the axial, longitudinal movement of the shaft/cable. Furthermore, Claim 1 specifically defines the construction employed in the cleaning system of the present invention which enables the single motor to cause the shaft/cable to rotate at a first speed, while also controlling the longitudinal, axial movement of the shaft/cable to be operated at a substantially slower, reduced speed. The Applicant maintains that this construction is not in any way taught or suggested by the prior art references.

As now defined in Claim 1, the cleaning system comprises a single drive motor having a drive shaft associated therewith which rotates at a first rotational speed. In addition, a coupling is mounted to the drive shaft which causes the shaft/cable to rotate

at the same, first rotational speed. In this way, the brush mounted to the shaft/cable continuously rotates at the first rotational speed.

Furthermore, Claim 1 defines the incorporation of a pinion gear mounted to the drive shaft of the single motor, with the pinion gear drivingly engaged with a plurality of gear members which are constructed to cooperate with the shaft/cable and cause the shaft/cable to move longitudinally or axially in either a forward or rearward direction.

In addition, the gear members are constructed to receive the rotational movement of the pinion gear at the first rotational speed and cause the gear members themselves to rotate at a second rotational speed which is substantially less than or reduced from the first rotational speed. As a result, the brush rotates at a speed which is substantially faster than the speed at which the brush and the shaft/cable to which it is mounted is able to move longitudinally or axially through the tubes being cleaned. As detailed herein, this construction is not taught or suggested by the prior art references.

In Grimsley, U.S. Patent 5,235,718, the principal reference upon which the Examiner has relied, the tube cleaning apparatus taught therein is specifically defined as incorporating two separate and independent motors, one of which causes the shaft/cable to rotate for driving the brush, while the other second motor drives the gear members which longitudinally move the shaft/cable. In this regard, the Examiner's attention is drawn to Column 4, lines 39-62, particularly lines 47-51. As detailed

therein, the first motor is reversible drive motor 16 which provides a rotary drive to the drive head via a flexible drive cable or shaft 18 while drive shaft 20 incorporates a second drive motor for rotating the cleaning brush via a flexible casing 22 which encases a flexible drive shaft 24.

Clearly, the construction taught in this prior art reference requires two separate and independent motors, one motor for achieving the rotation of the shaft/cable, which rotates the cleaning brush, and a second motor for rotating the gear members which causes the shaft/cable to move longitudinally or axially. As a result, the unique construction specifically defined in Claim 1 of the present invention is incapable of being taught or suggested by this prior art reference, since Claim 1 specifically defines a single motor which is constructed for achieving both the rotation of the shaft/cable and the longitudinal movement of the shaft/cable at substantially different speeds. Consequently, there can be no doubt that the structure taught in Claim 1 is not in any way taught or suggested by the cited reference.

Furthermore, in regard to the Examiner's arguments that Grimsley effectively teaches a construction incorporating a gear reducing the pinion gear, reconsideration of the Examiner's arguments are respectfully requested. As the Examiner has noted, there is no discussion or suggestion in the detailed disclosure regarding the use of a gear reducing configuration. The Examiner's reliance on this reference for such teaching is totally dependent upon the size of the gears shown in FIGURE 4. Applicant maintains

that such a reliance is incapable of providing the teaching suggested by the Examiner, since patent drawings are not required to be drawn to scale and no individual having ordinary skill in the start would look to the drawings for the teaching suggested by the Examiner.

Furthermore, if the suggestion of a gear reduction construction in this prior art reference is maintained by the Examiner, this position is of no real significance, inasmuch as Grimsley specifically requires two separate and independent motors in order to achieve the two separate operational movements of the shaft/cable, while the present invention, as defined in Claim 1, achieves both operational movements of the shaft/cable at completely different speeds, using a single motor. Clearly, a construction of the nature as specifically defined in amended Claim 1 is not in any way taught or suggested by Grimsley, or any of the other cited references. As result, the Applicant believes that Claim 1 as now amended is clearly in condition for allowance.

Claims 2-9, 20 and 21 are all dependent upon Claim 1 and add novel combinations there too. For this reason, as well as a reasons detailed above in reference to Claim 1, the Applicant believes that these dependent claims are also in condition for allowance.

Claim 18 is an independent claim which has been amended in a manner substantially identical to the amendments incorporated into Claim 1 and detailed above. As a result, Claim 18 specifically defines the portable cleaning system of the

present invention with the single motor being constructed for achieving the rotation of the shaft/cable at a first rotational speed, while also enabling the longitudinal, axial movement of the shaft/cable to be achieved at a second, substantially reduced speed using the same motor. Furthermore, in Claim 18, the first rotational speed is specifically defined as being about twice the second rotational speed. The Applicant maintains that this construction, with its further detailed limitation, clearly and unequivocally distinguishes the prior art reference of Grimsley and is in condition for allowance.

Claim 19 is dependent upon Claim 18 and adds novel combinations thereto. For this reason, as well as a reasons detailed above in reference to Claim 18, Claim 19 is also believed to be in condition for allowance.

The Applicant has noted, with appreciation, that the Examiner has found that Claim 12 contains allowable subject matter. As a result, Claim 12 has been re-written as an independent claim incorporating the limitations previously found in Claims 1, 10 and 11. As a result, the Applicant believes that Claim 12 is now in condition for allowance.

Claim 13-17 are all dependent upon Claim 12 and add novel combinations thereto. For this reason, and the reasons detailed above in reference to Claim 12, these dependent claims are also believed to be in condition for allowance.

Based upon the foregoing amendment and the arguments set out herein, the Applicant believes that the pending claims are now all in condition for allowance and

an early notice of allowability is earnestly solicited. If any questions remain which may be resolved in a telephone interview, Applicant's undersigned Attorney would gladly discuss such issues with the Examiner at the Examiner's convenience. For this purpose, Applicant's undersigned Attorney has provided his telephone number below.

Respectfully submitted,

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